

REMARKS/ARGUMENTS

Claims 13-16 and 18-33 are pending in the present application. Claims 1-12 and 17 were previously canceled in prior amendments. Claims 14, 18 and 20-25 have been currently amended. New Claims 32-33 have been added. Support for the amended and new claims can be found throughout the specification and in the original claims. Claim 24 has been amended to specify that the polymerization from 0 to 50°C to a temperature of no more than 102 to 104°C, provides an aqueous polymer or copolymer solution or an aqueous polymer or copolymer gel. Particular support for amended Claim 24 is found on pages 8-10 and in the examples on pages 11-19 of the specification. Particular support for new Claims 32 and 33 are found on page 9 and pages 11-19 of the specification. No new matter is believed to have been introduced by the amendments or the new claims.

Applicants wish to thank the Examiner for the courteous discussion on February 20, 2004. At that time, Applicants' representatives discussed the 35 U.S.C. § 103(a) rejection, in light of the disclosure in U.S. Patent 4,954,562 to Anderson; and the 35 U.S.C. 112, first paragraph rejection. Applicants wish to thank the Examiner for withdrawing the 35 U.S.C. § 112, first paragraph rejection. The following is intended to expand upon the discussion with the Examiner, in regards to the 35 U.S.C. § 103(a) rejection.

Claim Rejections Under 35 U.S.C. § 103

The Examiner rejected Claims 13-16 and 18-31 under 35 U.S.C. § 103(a), as unpatentable over U.S. Patent 4,954,562 to Anderson (hereinafter "Anderson"), in view of U.S. Patent 4,929,717 to Chmelir (hereinafter "Chmelir"), for the reasons cited in the present Office Action. Applicants respectfully traverse this rejection for the following reasons.

The Anderson invention is directed to a process for preparing improved water absorbent cross-linking resins of low water content by aqueous solution polymerization,

without any additional dehydrating or drying steps (see column 2, lines 41-46). During the polymerizations, the resin is dried to an acceptable water content of less than 15% by weight of the polymer (see column 3, lines 55-57 and column 11, lines 41-51). Moreover, the heat of the polymerization and cross-linking reactions evaporate water rapidly from the reaction system to form a dry solid (less than 15% by weight water), water absorbent resin, without the need for any subsequent drying step (see column 6, lines 43-48 and column 4, lines 40-47). Thus, the polymerizations disclosed in Anderson proceed with the evaporation of the bulk of the initial solvent content to produce a solid resin at the end of the polymerization.

Claim 24 has been amended to recite that, in the process for producing a water-soluble or water-swellaable polymer or copolymer, the free radical polymerizing is started at a temperature of from 0 to 50°C, and is performed in an aqueous solution at a maximum temperature of no more than 102 to 104°C, to provide an aqueous polymer or copolymer solution or an aqueous polymer or copolymer gel; and, subsequent to completion of said free-radical polymerizing step, heating said water-soluble or water-swellaable polymer or copolymer at a temperature of from 120 to 240°C. Applicants submit that Anderson does not teach or suggest the present process, as it does not teach or suggest obtaining at the end of polymerization, an aqueous solution or gel of the polymer or copolymer. In fact, Anderson desires a solid resin from the evaporation of solvent during polymerization, and therefore teaches away from a process in which the free radical polymerization occurs at a maximum temperature or no more than 102 to 104°C, to form an aqueous polymer or copolymer solution or an aqueous polymer or copolymer gel. The defects in Anderson are not cured by the disclosure in Chmelir. Anderson specifically teaches obtaining a solid when polymerization is complete, and driving off the solvent (water) during polymerization, such that no further drying step is required. Accordingly, why would one skilled in the art combine this with the drying procedure of Chmelir?

For at least the above reasons, Applicants respectfully submit Anderson, in view of Chmelir, does not teach or suggest Applicants' pending Claim 24. Furthermore, since Claims 13-16, 18-23 and 25-31 depend directly or indirectly from Claim 24, Applicants submit that Anderson, in view of Chmelir, does not teach or suggest these dependent claims.

Claim Rejections Under 35 U.S.C. § 112

Per the discussion with the Examiner on February 20, 2004 with Applicants' representatives, the Examiner has agreed to withdraw the rejection of Claim 24 and dependent Claims 13-16, 18-23 and 25-31 under 35 U.S.C. § 112, first paragraph, based on the description in Applicants' specification on page 14 (Examples 6-35). Applicants also refer the Examiner to Examples 1-5 and 36-41, on pages 11-19 of the specification.

Double Patenting Rejection

The Examiner rejected Claims 13-16 and 18-31 under the judicially created doctrine of obviousness-type double patenting, as unpatentable over Claims 1-19 of U.S. Patent 6,552,141.

Applicants provide herewith a Terminal Disclaimer to obviate the rejection over U.S. Patent 6,552,141, in compliance with 37 C.F.R. 1.321(c). Accordingly, the rejection should be withdrawn.

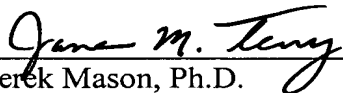
Applicants submit that the present amendment now places the application in condition for allowance. Applicants respectfully request the withdrawal of the above rejections and the passage of all now pending claims to issue.

Respectfully submitted,

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